

217/782-2113

"REVISED"
TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT¹

PERMITTEE

Orica Nitrogen LLC
Attn: Tony Massa
7700 West DuPont Road
Morris, Illinois 60450

<u>Application No.:</u> 96030162	<u>I.D. No.:</u> 063813AAE
<u>Applicant's Designation:</u>	<u>Date Received:</u> March 8, 1996
<u>Operation of:</u> Nitric Acid Chemical Plant	
<u>Date Issued:</u> November 19, 2002	<u>Expiration Date</u> ² : November 19, 2007
<u>Source Location:</u> 7700 West DuPont Road, Morris, Grundy County	
<u>Responsible Official:</u> Ben Van Veckhoven	

This permit is hereby granted to the above-designated Permittee to OPERATE a chemical manufacturing facility, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

Revision Date Received: May 10, 2004
Revision Date Issued: April 24, 2006
Purpose of Revision: Minor Modification

This minor modification adds items to the insignificant activities list, incorporates emission factors based on stack tests, and corrects typographical errors.

The Permittee has made the following requests that are denied:

1. Delete section 7.5 and make a 1000 gallon gasoline storage tank an insignificant activity.
2. Add shutdown provisions to Condition 7.2.5

The Permittee has made the following requests that cannot be addressed as a minor modification, but can be addressed as a significant modification:

1. Allow the use of CEM monitoring results to take the place of visual observations to determine if NO_x opacity is greater than 5% [35 IAC 217.381 (b) (2)]
2. Average monitoring data over 3 hour block averaging periods.

This document contains the entire CAAPP permit and contains terms that have been revised as a result of this permitting action. If a conflict exists between this document and previous versions of the CAAPP permit, this document supercedes those terms and conditions of the permit for which the conflict exists.

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If you have any questions concerning this permit, please contact Jack Yates at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:JMY:psj

cc: Illinois EPA, FOS, Region 1
USEPA

¹ This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated there under, including 40 CFR 52.21 - federal PSD and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.

² Except as provided in Condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 Source

Orica Nitrogen LLC
7700 West DuPont Road
Morris, Illinois 60450
815/653-2411

I.D. No.: 063813AAE
Standard Industrial Classification: 2873, Nitric Acid Chemical
Products

1.2 Owner/Parent Company

Orica Nitrogen LLC
33101 East Quincy Avenue
Watkins, Colorado 80137

1.3 Operator

Orica Nitrogen LLC
7700 West DuPont Road
Morris, Illinois 60450

Tony Massa, Environmental Engineer
815/357-8711 x305

1.4 General Source Description

The Orica Nitrogen LLC facility is located at 7700 West DuPont Road in Grundy County, Illinois. This source manufactures nitric acid and ammonium nitrate prills. These chemical products are key ingredients in the production of commercial explosives. The facility also operates combustion units for the production of steam and heat.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AOP	Ammonia Oxidation Process
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
BACT	Best Available Control Technology
Btu	British thermal unit
°C	Degrees Celsius
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
cfm	Cubic feet per meter
CFR	Code of Federal Regulations
cm	Centimeter
dscf	Dry standard cubic feet
dscm	Dry standard cubic meter
EPA	Environmental Protection Agency
ERMS	Emissions Reductions Market System
°F	Degrees Fahrenheit
ft	Feet
ft ³	Cubic feet
gal	Gallon
g	Grams
HAP	Hazardous Air Pollutant
HP	Horsepower
hr	Hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
in	Inch
kg	Kilogram
kPa	Kilopascals
kW	Kilowatts
LEL	Lower Explosive Limit
lb	Pound
m	Meter
Mft ³	Mega cubic feet
Mg	Megagram
min	Minute
mmBtu	Million British thermal units
mmft ³	Millimeter cubic feet
mmHg	Millimeter mercury

mo	Month
mph	Miles per hour
NESHAP	National Emission Standards for Hazardous Air Pollutants
NH ₃	Ammonia
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM-10	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	Parts per million
PSD	Prevention of Significant Deterioration
psi	Pounds per square inch
RMP	Risk Management Plan
sec	Seconds
scf	Standard cubic feet
SO ₂	Sulfur Dioxide
T	Tons
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material
yr	Year

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

- 3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a) (1) and 201.211, as follows:

Diesel Fuel Storage Tank (2000 gallon)

- 3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a) (2) or (a) (3), as follows:

Anhydrous Ammonia Storage Tanks (61, 62, 63)

Nitric Acid Railcar and Tank Truck Loading/Unloading Operations

Ammonium Nitrate Solution Storage Tanks

Aluminum Sulfate Solution Storage Tank

Loading/Unloading Ammonium Nitrate Solution for Railcars and Tank trucks

Sulfuric Acid Storage Tank

Reject System Evaporator

Ammonium Nitrate Prill Rail/Truck Loading

- 3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a) (4) through (18), as follows:

Extruders used for the extrusion of metals, minerals, plastics, rubber, or wood, excluding extruders used in the manufacture of polymers, provided that volatile organic materials or class I or II substances subject to the requirements of Title VI of the CAA are not used as foaming agents or release agents or were not used as foaming agents in the case of extruders processing scrap material [35 IAC 201.210(a) (5)].

Equipment used for filling drums, pails, or other packaging containers, excluding aerosol cans, with soaps, detergents, surfactants, lubricating oils, waxes, vegetable oils, greases, animal fats, glycerin, sweeteners, corn syrup, aqueous salt

solutions, or aqueous caustic solutions [35 IAC 201.210(a)(8)].

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

Loading and unloading systems for railcars, tank trucks, or watercraft that handle only the following liquid materials, provided an organic solvent has not been mixed with such materials: soaps, detergents, surfactants, lubricating oils, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(18)].

- 3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable. Compliance with applicable requirements shall be addressed by the routine operating information and records that are otherwise maintained by the source, which the Permittee shall make available for inspection by the Illinois EPA upon request.

- 3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.
- 3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690. Units in compliance with 35

IAC 218.302 or 218.303 are exempt from the provisions of 35 IAC 218.301.

3.3 Addition of Insignificant Activities

- 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).
- 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12) (b) of the Act.
- 3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Units	Description	Date Constructed	Control Equipment
Boilers	Produces Steam for Nitric Acid and Prill Processes	Prior 1972 Prior 1972	None
No. 3 AOP Nitric Acid Plant	Produces Nitric Acid by Oxidizing an Ammonia Air Mixture	Prior 1972	Abaters
Nitric Acid Storage Tanks	Stores Nitric Acid Produced	Prior 1972	None
Ammonium Nitrate Prill Plant	Produces Prills From Anhydrous Ammonia and Nitric Acid	Prior 1972	Scrubbers Rotoclones
Gasoline Storage Tank	1000 Gallon Tank which Stores Gasoline for Vehicle Use	Prior 1972	None
Fugitives	Road Dust	N/A	None

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of nitrogen oxides (NO_x) and particulate matter (PM) emissions.

5.1.2 This permit is issued based on the source not being a major source of hazardous air pollutants (HAPs).

5.2 Applicable Regulations

5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.

5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
- b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.
- c. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2,000 ppm [35 IAC 214.301].

5.2.3 The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with

the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.
- 5.2.4
- a. This stationary source, as defined in 40 CFR Section 68.3, is subject to 40 CFR Part 68, the Accidental Release Prevention regulations [40 CFR 68.215(a)(1)].
 - b. The owner or operator of a stationary source shall revise and update the Risk Management Plan (RMP) submitted, as specified in 40 CFR 68.190.
- 5.2.5
- a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71.
 - b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.
- 5.2.6 CAM Plan

This stationary source has a pollutant-specific emissions unit that is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The source must submit a CAM plan for each affected pollutant-specific emissions unit upon application for renewal of the initial CAAPP permit, or upon a significant modification to the CAAPP permit for the construction or modification of a large pollutant-specific emissions unit which has the potential post-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

5.3 Non-Applicability of Regulations of Concern

None, except as identified on a unit-specific basis in Section 7 of this permit.

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	2.9
Sulfur Dioxide (SO ₂)	0.30
Particulate Matter (PM)	432.6
Nitrogen Oxides (NO _x)	466.2
HAP, not included in VOM or PM	----
TOTAL	902.00

5.5.2 Emissions of Hazardous Air Pollutants

This permit is issued based on the emissions of HAPs as listed in Section 112(b) of the CAA not being equal to or exceeding 10 tons per year of a single HAP or 25 tons per year of any combination of such HAPs, so that this source is considered a minor source for HAPs.

5.5.3 Other Source-Wide Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However, there may be unit

specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.

5.6.2 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain all emissions information for the previous calendar year.

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping of Condition 5.6, and the recordkeeping Compliance Procedures in Section 7 (Unit Specific Conditions) of this permit.

6.0 NOT APPLICABLE TO THIS PERMIT

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit: Boilers

7.1.1 Description

Natural gas fired boilers are used to produce steam for nitric acid and ammonium nitrate prill production processes and building heat.

7.1.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Equipment	Description	Emission Control Equipment
Boilers	Boiler No. 5	Natural Gas-Fired Boiler, Maximum Heat Input Capacity: 84 mmBtu/hr	None
	Boiler No. 6	Natural Gas-Fired Boiler, Maximum Heat Input Capacity: 78 mmBtu/hr	None

7.1.3 Applicable Provisions and Regulations

- An "affected boiler" for the purpose of these unit specific conditions is a steam generating unit that is fired with natural gas as identified in Condition 7.1.2.
- Each affected boiler is also subject to the emission limits identified in Condition 5.2.2(b).
- No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lb/mmBtu) [35 IAC 212.206].

7.1.4 Non-Applicability of Regulations of Concern

- Each affected boiler is not subject to 35 IAC 217.141, because the actual heat input of the affected boiler is less than 73.2 MW (250 mmBtu/hr).
- Pursuant to 35 IAC 218.303, fuel combustion emission units are not subject to 35 IAC 218.301, Use of Organic Material.

- c. This permit is issued based on the affected boilers not being subject to the NSPS for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60 Subpart Db, or the NSPS for Small-Industrial-Commercial-Institutional Steam Generating Units 40 CFR 60 Subpart Dc, because they were constructed prior to June 9, 1984 and have not been constructed, modified or reconstructed after this date.
- d. This permit is issued based on the affected boilers not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected boilers do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.1.5 Operational and Production Limits and Work Practices

Each affected boiler shall only be fired by natural gas as the fuel.

7.1.6 Emission Limitations

There are no specific emission limitations for these units, however, there are source wide emission limitations in Condition 5.5 that include these units.

7.1.7 Testing Requirements

- a. Upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 IAC Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA [35 IAC 212.110(c)].
- b. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(d) of the Act, measurement of opacity shall be conducted in accordance with Method 9, 40 CFR part 60, Appendix A, and 35 IAC 212.109, so as to demonstrate compliance with the emission limits in Condition 7.1.3(b).

7.1.8 Monitoring Requirements

None

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected boiler to demonstrate compliance with Conditions 5.5.1 and 7.1.3 pursuant to Section 39.5(7)(b) of the Act:

- a. Pursuant to 35 IAC 212.110(e) and Section 39.5(7)(e) of the Act, the owner or operator of an emission unit subject to 35 IAC 212 shall retain records of the tests which are performed. These records shall be retained for at least five (5) years after the date a test is performed and shall include the following:
 - i. The date, place and time of sampling or measurements;
 - ii. The date(s) analyses were performed;
 - iii. The company or entity that performed the analyses;
 - iv. The analytical techniques or method used;
 - v. The results of such analyses; and
 - vi. The operating conditions as existing at the time of sampling or measurement.
- b. Natural gas fuel usage for the affected boilers, Mft³/mo and Mft³/yr;
- c. Monthly and annual aggregate NO_x, PM, SO₂, and VOM emissions from each affected boiler, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of an affected boiler with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventative measures taken:

- a. A person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test

methods from 35 IAC 212.110 that will be used [35 IAC 212.110(d)].

- b. The use of any fuel other than the fuels specified in Condition 7.1.5 with the length of time this fuel was used and the effect on emissions within 30 days of this violation being detected.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.1.9 and the emission factors and formulas listed below:

- a. Compliance with Conditions 7.1.3(c) is assumed by the work-practices inherent in operation of natural gas-fired boilers.
- b. For purpose of determining compliance with Condition 5.5.1, emission from affected boilers shall be based on the emission factors listed below:

<u>Pollutant</u>	Emission Factor	Emission Factor
	For Boiler #5 <u>(lb/Mft³)</u>	For Boiler #6 <u>(lb/Mft³)</u>
NO _x	100	100
SO ₂	0.6	0.6
PM	7.6	7.6
VOM	5.5	5.5

These are the emission factors for uncontrolled natural gas combustion, Tables 1.4-1 and 1.4-2, AP-42, Volume I, Fifth Edition, Supplement D, March, 1998.

Boiler Emissions (lb) = (natural gas consumed Mft³) x (The Appropriate Emission Factor, lb/Mft³)

7.2 Unit: No. 3 AOP Nitric Acid Plant
Control: Abaters No. 1 and No. 2

7.2.1 Description

This process emission unit uses the Ammonia (NH₃) Oxidation Process (AOP) to manufacture Nitric Acid. Liquid NH₃ is vaporized, brought to superheated temperature and reacted with preheated air at a converter containing a platinum-palladium-rhodium catalyst. The catalyst is lit to be effective, and the exothermic reaction forms various oxides of nitrogen and excess heat. Filters purify the NH₃ and air used and recovers any carryover catalyst. The heat is used to preheat other processes and/or the boiler(s) to generate steam. Nitric oxide (NO) is separated and recycled to form nitrogen dioxide (NO₂). The cooled gas stream then passes thru the absorption tower where it reacts with water to form 58 percent nitric acid. A portion of this acid is removed and strengthened to make 65 percent nitric acid. Excess gas from the absorption tower is withdrawn through a mist separator as tail gas and residual NO₂. The residual NO₂ from the various unit processes passes through a first abater converting it back to NO, then through a second abater to convert it back to mainly nitrogen and water. The amount of nitrogen oxides exiting the stack is monitored by a continuous emissions monitor (CEM).

7.2.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Nitric Acid Plant	Equipment for Manufacture of Nitric Acid by Ammonia Oxidation	Abaters No. 1 and No. 2

7.2.3 Applicability Provisions and Applicable Regulations

- a. The Nitric Acid Plant as described in Conditions 7.2.1 and 7.2.2 is an "affected acid plant" for the purpose of these unit-specific conditions.
- b. The affected acid plant is subject to the emission limits identified in Condition 5.2.2.
- c. The affected acid plant is subject to 35 IAC 217.381(b), Nitric Acid Manufacturing Processes, which provides that:
 - i. Existing Weak Nitric Acid Processes. Pursuant to 35 IAC 217.381(b), no person shall cause or allow the emission of nitrogen oxides into the atmosphere from any existing weak nitric acid

manufacturing process to exceed the following standards and limitations:

- A. 2.75 kg of nitrogen oxides (expressed as nitrogen dioxide) per metric tonne of acid produced (100 percent acid basis) (5.5 lbs/T) [35 IAC 217.381(b)(1)];
- B. Visible emissions in excess of 5 percent opacity [35 IAC 217.381(b)(2)];

7.2.4 Non-Applicability of Regulations of Concern

The affected acid plant is not subject to 35 IAC 217.381(c), Concentrated Nitric Acid Processes, because the Source does not produce concentrated nitric acid.

7.2.5 Operational and Production Limits and Work Practices

a. Startup Provisions

The Permittee is authorized to operate an affected acid plant in violation of the applicable limit of 35 IAC 217.381 during startup pursuant to 35 IAC 201.262, as the Permittee has affirmatively demonstrated that all reasonable efforts have been made to minimize startup emissions, duration of individual starts, and frequency of startups. This authorization is subject to the following:

- i. This authorization only extends for a period of up to two and half (2 ½) hours during each startup event.
- ii. The Permittee shall take the following measures to minimize startup emissions, the duration of startups and minimize the frequency of startups:

Implementation of established startup procedures, including the "No. 3 AOP Start-up Emissions Reduction Program"; and

- iii. The Permittee shall fulfill applicable recordkeeping requirements of Condition 7.2.9(c).

b. The owner or operator shall follow good operating practices for the abators including periodic inspection, routine maintenance, repair of defects and visual emission checks.

7.2.6 Emission Limitations

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.2.7 Testing Requirements

- a. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(d) of the Act, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR part 60, Appendix A, and 35 IAC 212.109, so as to demonstrate compliance with the emission limits in Condition 7.2.3(b).
- b. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(d) of the Act, emission measurements shall be conducted as follows, so as to demonstrate compliance with the emission limits in Condition 7.2.3(c):

Measurement of nitrogen oxides shall be according to the phenol disulfonic acid method as published in 36 Fed. Reg. 15, 718, Method 7 [35 IAC 217.101].

7.2.8 Monitoring Requirements

- a. Except for sources permitted to use alternative monitoring pursuant to 35 IAC 201.402, compliance with the Illinois emissions limitations by the owners and operators of emission sources required to monitor continuously shall be determined by the use of equipment which meets the performance specifications set forth in paragraphs 3.1 through 3.8 of 40 CFR 51, Appendix P (1987), and relevant regulations promulgated by the USEPA under Section 111 of the Clean Air Act (42 USC 7411), as amended [35 IAC 201.401(b)].
- b. The monitoring and recording requirements of Condition 7.2.8 (see also 35 IAC 201 Subpart L) shall not be applicable during any period of a monitoring system or device malfunction if demonstrated by the owner or operator of the source that the malfunction was unavoidable and is being repaired as expeditiously as practicable. This demonstration may include, but is not limited to, evidence that the device has been properly calibrated and maintained, adequate spare parts are on hand, and trained technicians are available to make repairs [35 IAC 201.404].
- c. Pursuant to 35 IAC 201.406, to convert monitoring data to the units of the emission limitation, owners and operators of sources subject to Condition 7.2.8 (see also 35 IAC 201 Subpart L) shall use:

- i. The procedures specified in regulations adopted by the USEPA under Section 111 of the Clean Air Act and made applicable in Illinois pursuant to Section 9.1 of the Illinois Environmental Protection Act; or where necessary [35 IAC 201.406(a)];
 - ii. The procedures specified in 40 CFR 51, Appendix P, paragraph 5 (1987) [35 IAC 201.406(b)]; or
 - iii. Alternative measurement and data reduction methods may be utilized if demonstrated by the owner or operator of the affected source by means including, but not limited to, instrument accuracy tests that such alternative methods will provide information equivalent to the information which would be provided by the above methods [35 IAC 201.406(c)].
- d. Monitoring data shall be averaged over eight (8) consecutive 3-hour block averaging periods per operating day.

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected acid plant to demonstrate compliance with Conditions 5.5.1 and 7.2.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Pursuant to 35 IAC 212.110(e) and Section 39.5(7)(e) of the Act, the owner or operator of an emission unit subject 35 IAC Part 212 shall retain records of all tests which are performed. These records shall be retained for at least five (5) years after the date a test is performed and shall include the following:
 - i. The date, place and time of sampling or measurements;
 - ii. The date(s) analyses were performed;
 - iii. The company or entity that performed the analyses;
 - iv. The analytical techniques or methods used;
 - v. The results of such analyses; and
 - vi. The operating conditions as existing at the time of sampling or measurement.
- b. Pursuant to 35 IAC 201.407, owners and operators of sources which are subject to the monitoring and recording requirements of Condition 7.2.8 (see also 35 IAC 201 Subpart L) shall maintain files of emission information at the facility and make the information available to the Illinois EPA upon

request. This information shall be retained for at least two years from the date of collection, and shall include:

- i. Emission measurements [35 IAC 201.407(a)];
- ii. Continuous monitoring system performance testing measurements [35 IAC 201.407(b)];
- iii. Performance evaluations [35 IAC 201.407(c)];
- iv. Calibration checks [35 IAC 201.407(d)];
- v. Maintenance and adjustments performed [35 IAC 201.407(e)];
- vi. Quarterly reports submitted pursuant to Condition 7.2.10(b) (see also 35 IAC 201.405) [35 IAC 201.407(f)]; and
- vii. Data reduction information used pursuant to Condition 7.2.8(d) (see also 35 IAC 201.406) [35 IAC 201.407(g)].

c. Records for Startup

The Permittee shall maintain the following records, pursuant to Section 39.5(7)(b) of the Act, for the affected acid plant subject to Conditions 7.2.3 and 7.2.5, which at a minimum shall include:

- i. The following information for each startup of the affected acid plant:
 - A. Date and duration of the startup, i.e., start time and time normal operation achieved, i.e., proper temperature of inlet gas stream to the abaters: stable operation at load;
 - B. If normal operation was not achieved within two and one-half (2 ½) hours, an explanation why startup could not be achieved in two and one-half (2 ½) hours;
 - C. A detailed description of the startup, including reason for operation and whether the procedures of the "No. 3 AOP Start-up Emissions Reduction Program" were performed;
 - D. An explanation why the procedures of the "No. 3 AOP Start-up Emissions Reduction Program" and other established startup procedures could not be performed, if not performed;
 - E. The nature of opacity, i.e., severity and duration, during the startup and the nature of opacity at the conclusion of startup, if above normal; and

- F. Whether exceedance of Conditions 5.2.2(b) and 7.2.3(b) may have occurred during startup, with explanation and estimated duration (minutes).
 - ii. A maintenance and repair log for each abater, listing each activity performed with date.
- d. The Permittee shall maintain the following records for the affected acid plant subject to Conditions 7.2.3 and 7.2.5, which at a minimum shall include:
 - i. The following information for each shutdown of the affected acid plant:
 - A. Date and time of the shutdown;
 - B. If shutdown was not achieved within (1)hour, an explanation why shutdown could not be achieved in one(1) hour;
 - C. Reason for the shutdown;
 - D. Whether exceedance of Conditions 5.2.2(b)and 7.2.3(b)may have occurred during shutdown, with an explanation and estimated duration (minutes).
- e. Records addressing use of good operating practices for the abaters:
 - i. Records for periodic inspection of the abaters with date, individual performing the inspection, and nature of inspection; and
 - ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
- f. Nitric acid production rate (tons/day and tons/yr) and the types of nitric acid produced (i.e., weak nitric acid or concentrated nitric acid);
- g. A copy of the most recent "No. 3 AOP Start-up Emissions Reduction Program", including any revisions made pursuant to an Emissions Reductions Program;
- h. NO_x emissions as determined by the Continuous Emission Monitor (CEM) with documentation of calculations, as applicable; and
- i. A record of observed excess visible emissions.

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected acid

plant with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. A person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from Condition 7.2.7(a) (see also 35 IAC 212.110) that will be used [35 IAC 212.110(d)].
- b. Pursuant to 35 IAC 201.405, owners and operators of sources subject to the continuous monitoring requirements of Condition 7.2.8 (see also 35 IAC 201 Subpart L) shall report the following information:
 - i. Pursuant to 35 IAC 201.405(a), for periods of emissions in excess of any emission limitation applicable to the source adopted by the Board:
 - A. The starting date and time of the excess emissions [35 IAC 201.405(a)(1)];
 - B. The duration of the excess emissions [35 IAC 201.405(a)(2)];
 - C. The magnitude of excess emissions [35 IAC 201.405(a)(3)];
 - D. The cause of the excess emissions, if known [35 IAC 201.405(a)(4)];
 - E. Corrective actions and actions taken to lessen the emissions [35 IAC 201.405(a)(5)];
 - F. The operating status of the monitoring system, including the dates and times of any periods during which it was inoperative [35 IAC 201.405(a)(6)]; and
 - G. Other information, including but not limited to, monitoring location, monitoring maintenance records and source operating hours, which the Illinois EPA may require by permit [35 IAC 201.405(a)(7)].
 - ii. If there were no excess emissions during the reporting period, the report shall so state and include information about the operating status of the monitoring equipment during that period [35 IAC 201.405(d)].
 - iii. Reports shall be submitted within 45 days of the end of every calendar quarter [35 IAC 201.405(e)].

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.2.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.1.9 and the emission factors and formulas listed below:

- a. Compliance with Condition 7.2.3(c) is assumed by proper operation of the abaters and by use of the CEMS, as addressed by Conditions 7.2.5, 7.2.8, and 7.2.9(b) and (d).
- b. To determine compliance with Condition 5.5.1, emissions of NO_x shall be obtained from CEMS data.

7.3 Unit: Nitric Acid Storage Tanks

7.3.1 Description

The Permittee stores nitric acid produced from its manufacturing operations in 14 storage tanks at the facility. These tanks were constructed prior to 1972, have fixed roofs, and are vented to the atmosphere.

7.3.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Storage ¹ Tanks	Stores Nitric Acid Produced	Prior to 1972	None

¹ See Attachment 1 for summary of storage tank features.

7.3.3 Applicability Provisions and Applicable Regulations

- a. The nitric acid storage tanks identified in Condition 7.3.2 and described in Condition 7.3.1 are "affected tanks" for the purpose of these unit-specific conditions.
- b. The affected nitric acid plant is subject to 35 IAC 217.381, Nitric Acid Manufacturing Processes, which provides that:

Existing Weak Nitric Acid Processes. No person shall cause or allow the emission of nitrogen oxides into the atmosphere from any existing weak nitric acid manufacturing process to exceed 0.1 kg of nitrogen oxides (expressed as nitrogen dioxide) per metric tonne of acid produced (100 percent acid basis) from any acid storage tank vents (0.2 lbs/T) [35 IAC 217.381(b) (3)].

7.3.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected nitric acid storage tanks not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected tanks do not use an add-on control device to achieve compliance with an emission limitation or standard.
- b. This permit is issued based on the affected nitric acid storage tanks not being subject to 35 IAC 215 Subpart B, because the affected tanks are not being used to store an organic material.

7.3.5 Operational and Production Limits and Work Practices

This permit is issued based on the affected nitric acid storage tanks not being used to store any organic materials.

7.3.6 Emission Limitations

There are no specific emission limitations for these units, however, there are source wide emission limitations in Condition 5.5 that include these units.

7.3.7 Testing Requirements

N/A

7.3.8 Monitoring Requirements

N/A

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected tanks to demonstrate compliance with Conditions 5.5.1, and 7.3.3, pursuant to Section 39.5(7)(b) of the Act:

- a. Nitric acid throughput of the affected tanks, tons/mo and ton/yr; and
- b. Monthly and aggregate annual NO_x emissions from the affected tanks (tons).

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance of an affected tank with the permit requirements pursuant to Section 39.5(7)(f)(iii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

The storage of any organic material, which is prohibited by Condition 7.3.5, within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.3.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.3.9 and the emission factors and formulas listed below:

To determine compliance with Condition 5.5.1, emissions of NO_x from the affected tanks may be calculated as follows:

$$\text{NO}_x \text{ emission (Tons)} = (\text{Nitric Acid Throughput, Tons}) \times (\text{emission factor, } 0.2 \text{ lb NO}_x/\text{Ton Nitric Acid Throughput}) \times 1 \text{ Ton}/2000 \text{ lb}$$

7.4 Unit: Ammonium Nitrate Prill Plant
Control: Scrubbers and Rotoclones

7.4.1 Description

Ammonium nitrate prills are produced by reacting anhydrous ammonia and weak nitric acid to produce an ammonium nitrate solution of approximately 83 percent. The solution is sent through an evaporator to remove excess water and to increase the concentration to about 97 percent. The concentrated melt is sprayed through holes into the top of a prilling chamber where it falls countercurrent to a rising air stream that solidifies and cools the ammonium nitrate droplets before they hit the bottom of the tower as low density spherical prills. The prills are placed in a pre-dryer and then a dryer and allowed to cool to lower the moisture content to less than 0.3 percent and the temperature to room level. Finally the prills are coated with Galdryl to prevent the hygroscopic material from picking up moisture during storage and shipment.

The primary emissions from the ammonium nitrate prill production are particulate matter of ammonium nitrate. These emissions are controlled by two scrubbers and three rotoclones in the production process.

7.4.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Equipment Description	Emission Control Equipment
Ammonium Nitrate Prill Plant	Ammonia Vaporizer - vaporizes the ammonia	None
	Neutralizer, Condenser, and Solution Tank - where anhydrous ammonia and weak nitric acid are combined	Scrubber #1 Scrubber #2
	Evaporator - concentrates ammonium nitrate solution	None
	Head Tank and Prilling Tower - forms ammonium nitrate prills from solution	None
	Pre-Dryer - reduces moisture content of prills	Rotoclone
	Dryer - further reduces moisture content of prills	Rotoclone
	Cooler - reduces temperature of prills	Rotoclone
	Rework Tanks (4) - prepare material to re-insert into the solution process	None

Emission Unit	Equipment Description	Emission Control Equipment
Ammonium Nitrate Prill Plant (cont)	Product Elevator, Coating Agent Hopper, & Coater – coats and stores the prills to prevent agglomeration	None

7.4.3 Applicability Provisions and Applicable Regulations

- a. The affected ammonium nitrate prill plant listed in Condition 7.4.2 and as described in Condition 7.4.1 is an “affected prill plant” for the purpose of these unit-specific conditions.
- b. The affected prill plant is subject to the emission limits identified in Condition 5.2.2.
- c. The affected prill plant is subject to 35 IAC 212.322(a), which provides that:

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 (see also Attachment 2) [35 IAC 212.322(a)].

7.4.4 Non-Applicability of Regulations of Concern

- a. The affected prill plant is not subject to 35 IAC 217 Subpart O, because the affected prill plant does not produce nitric acid.
- b. This permit is issued based on the affected prill plant not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected prill plant does not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels..

7.4.5 Operational and Production Limits and Work Practices

The owner or operator shall follow good operating practices for the scrubbers and rotoclones including periodic inspection, routine maintenance, repair of defects and visual emission checks.

7.4.6 Emission Limitations

There are no specific emission limitations for these units, however, there are source wide emission limitations in Condition 5.5 that include these units.

7.4.7 Testing Requirements

Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(d) of the Act, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR part 60, Appendix A, and 35 IAC 212.109, so as to demonstrate compliance with the emission limits in Condition 7.4.3(b).

7.4.8 Monitoring Requirements

None

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected prill plant to demonstrate compliance with Conditions 5.5.1 and 7.4.3, pursuant to Section 39.5(7)(b) of the Act:

- a. Pursuant to 35 IAC 212.110(e) and Section 39.5(7)(e) of the Act, the owner or operator of an emission unit subject 35 IAC Part 212 shall retain records of all tests which are performed. These records shall be retained for at least five (5) years after the date a test is performed and shall include the following:
 - i. The date, place and time of sampling or measurements;
 - ii. The date(s) analyses were performed;
 - iii. The company or entity that performed the analyses;
 - iv. The analytical techniques or methods used;
 - v. The results of such analyses; and
 - vi. The operating conditions as existing at the time of sampling or measurement.
- b. Records addressing use of good operating practices for the scrubbers and rotoclones:
 - i. Records for periodic inspection of the scrubbers and rotoclones with date, individual performing the inspection, and nature of inspection; and

- ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
- c. Amount of ammonium nitrate solution produced, lbs/mo and ton/yr;
- d. Operating schedule of the affected prill plant; and
- e. The monthly and annual PM emissions from the affected prill plant based on the amount of ammonium nitrate prill produced, or ammonium nitrate solution produced, as appropriate, with supporting calculations.

7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected prill plant with the permit requirements pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

- a. A person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from Condition 7.4.7 (see also 35 IAC 212.110) that will be used [35 IAC 212.110(d)].
- b. Continued operation of the affected prill plant with a defect in a scrubber or rotoclone that may result in emissions of particulate matter in excess of limits in Conditions 5.5.2, 7.4.3(b), or 7.4.3(c), within 30 days of such an occurrence.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.4.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.4.9 and the emission factors and formulas listed below:

- a. Compliance with Conditions 5.5.2, 7.4.3(b), and (c) is assumed by proper operation of the scrubbers and rotoclones, as addressed by Conditions 7.4.5 and 7.4.9(b).

- b. To determine compliance with Condition 5.5.1, PM emissions shall be calculated using prill production-based emission factors and equations for the following affected prill plant equipment:

Process	PM Emission Factor (Lb/Ton Prill Produced)
Evaporator	0.17
Prill Tower	1.20
Pre-Dryer	0.0299
Dryer	0.0176
Cooler	0.0302

PM (ton) = (prill production, ton) X (the appropriate above emission factor, lb/ton) X (1 ton/2000lb)

To determine compliance with Condition 5.5.1, PM emissions shall be calculated using ammonium nitrate solution production-based emission factors and equations for the following affected prill plant equipment:

Process	PM Emission Factor (Lb/Ton Ammonium Nitrate Solution Produced)
Neutralizer	0.0924

PM (ton) = (ammonium nitrate solution production, ton) X (the appropriate above emission factor, lb/ton) X (1 ton/2000 lb)

The above emission factors and formulas are based on information provided by the Permittee in the application for a minor modification to this permit.

7.5 Unit: Gasoline Storage Tank

7.5.1 Description

The Permittee operates a fixed roof storage tank that stores gasoline. Permanent submerged loading must be used for this tank, minimizing turbulence and evaporation of VOM during loading.

7.5.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Equipment Description	Emission Control Equipment
Gasoline Storage Tank	1000 Gallon Gasoline Storage Tank with Submerged Loading Pipe	Submerged Loading Pipe

7.5.3 Applicability Provisions and Applicable Regulations

- a. The gasoline tank identified in Condition 7.5.2 is an "affected tank" for the purpose of these unit-specific conditions.
- b. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA according to the provisions of 35 IAC 201, or unless such tank is a pressure tank as described in 35 IAC 215.121(a) or is fitted with a recovery system as described in 35 IAC 215.121(b) (2) [35 IAC 215.122(b)].
- c. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302, 215.303, or 215.304 and the following exemption: If no odor nuisance exists the limitation of 35 IAC 215 Subpart G shall only apply to photochemically reactive material [35 IAC 215.301].
- d. Pursuant to 35 IAC 215.583(a), no person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank at a gasoline dispensing operation unless:
 - i. The tank is equipped with a submerged loading pipe [35 IAC 215.583(a)(1)]; and
 - ii. Pursuant to 35 IAC 215.583(a)(2), the vapors displaced from the storage tank during filling

are processed by a vapor control system that includes one or more of the following:

- A. A vapor collection system that meets the requirements of Condition 7.x.5(c) (see also 35 IAC 215.583(d)(4)) [35 IAC 215.583(a)(2)(A)]; or
- B. A refrigeration-condensation system or any other system approved by the Illinois EPA that recovers at least 90 percent by weight of all vaporized organic material from the equipment being controlled [35 IAC 215.583(a)(2)(B)]; and
- C. The delivery vessel displays the appropriate sticker pursuant to the requirements of 35 IAC 215.584(b) or (d) [35 IAC 215.583(a)(2)(C)].

7.5.4 Non-Applicability of Regulations of Concern

- a. The affected tank is not subject to the NSPS for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984, 40 CFR 60 Subpart Kb, because the affected tank was constructed prior to 1984.
- b. The affected tank is not subject to the requirements of 35 IAC 215.123, Petroleum Liquid Storage Tanks, pursuant to 35 IAC 215.123(a)(2), which exempts storage tanks with a capacity less than 151.42 m³.
- c. This permit is issued based on the affected gasoline tank not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected tank does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.5.5 Operational and Production Limits and Work Practices

- a. The affected tank shall only be used for the storage of gasoline.
- b. Pursuant to 35 IAC 215.583(c), each owner of a gasoline dispensing operation shall:
 - i. Install all control systems and make all process modifications required by Condition 7.5.3(d) (see also 35 IAC 215.583(a)) [35 IAC 215.583(c)(1)];

- ii. Provide instructions to the operator of the gasoline dispensing operation describing necessary maintenance operations and procedures for prompt notification of the owner in case of any malfunction of a vapor control system [35 IAC 215.583(c)(2)]; and
 - iii. Repair, replace or modify any worn out or malfunctioning component or element of design [35 IAC 215.583(c)(3)].
- c. Pursuant to 35 IAC 215.583(d), each operator of a gasoline dispensing operation shall:
 - i. Maintain and operate each vapor control system in accordance with the owner's instructions [35 IAC 215.583(d)(1)];
 - ii. Promptly notify the owner of any scheduled maintenance or malfunction requiring replacement or repair of a major component of a vapor control system [35 IAC 215.583(d)(2)];
 - iii. Maintain gauges, meters or other specified testing devices in proper working order [35 IAC 215.583(d)(3)]; and
 - iv. Pursuant to 35 IAC 215.583(d)(4), operate the vapor collection system and delivery vessel unloading points in a manner that prevents:
 - A. A reading equal to or greater than 100 percent of the lower explosive limit (LEL measured as propane) when tested in accordance with the procedure described in EPA 450/2-78-051 Appendix B [35 IAC 215.583(d)(4)(A)]; and
 - B. Avoidable leaks of liquid during the filling of storage tanks [35 IAC 215.583(d)(4)(B)].

7.5.6 Emission Limitations

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.5.7 Testing Requirements

Within 15 business days after discovery of the leak by the owner, operator, or the Illinois EPA, repair and retest a

vapor collection system which exceeds the limits of Condition 7.5.5(c)(iv)(A) (see also 35 IAC 215.583(d)(4)(A)) [35 IAC 215.583(d)(5)].

7.5.8 Monitoring Requirements

None

7.5.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected tank to demonstrate compliance with Conditions 5.5.1, 7.5.3, and 7.5.5, pursuant to Section 39.5(7)(b) of the Act:

- a. Records of the testing of the affected tank pursuant to Condition 7.5.7, which include the following [Section 39.5(7)(e) of the Act]:
 - i. The date, place and time of sampling or measurements;
 - ii. The date(s) analyses were performed;
 - iii. The company or entity that performed the analyses;
 - iv. The analytical techniques or methods used;
 - v. The results of such analyses; and
 - vi. The operating conditions as existing at the time of sampling or measurement.
- b. Design information for the tank showing the presence of a permanent submerged loading pipe;
- c. Maintenance and repair records for the tank, as related to the repair or replacement of the loading pipe;
- d. The throughput of the affected tank, gal/mo and gal/yr; and
- e. The monthly and aggregate annual VOM emissions from the affected tank based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations.

7.5.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected tank

with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. Any storage of VOL in an affected tank that is not in compliance with the requirements of Conditions 7.5.3(b) and (d)(i) (see also 35 IAC 215.122(b) and 215.583(a)(1)), e.g., no "permanent submerged loading pipe," within five days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps taken to avoid future non-compliance;
- b. Any storage of VOL in an affected tank that is out of compliance with the requirements of Conditions 7.5.3(b) and (d)(i) (see also 35 IAC 215.122(b) and 215.583(a)(1)) due to damage, deterioration, or other condition of the loading pipe, within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance;
- c. The storage of any VOL or VPL other than the material specified in Condition 7.5.5(a) within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.5.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.5.9 and the emission factors and formulas listed below:

For the purpose of estimating VOM emissions from the affected tank to determine compliance with Conditions 5.5.1 and 7.5.3(c), Versions 3.1 or 4.0 of the TANKS program are acceptable.

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after September 9, 2002 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms so long as the changes do not violate applicable requirements or contravene federally enforceable permit terms or conditions that are monitoring (including tests methods), recordkeeping, reporting, or compliance certification requirements without applying for or

obtaining an amendment to this permit, provided that the changes do not constitute a modification under Title I of the CAA, emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change and the Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change [Section 39.5(12)(a) of the Act]. This notice shall:

- a. Describe the physical or operational change;
- b. Identify the schedule for implementing the physical or operational change;
- c. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
- d. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
- e. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, as specified in the conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

Monitoring Period

Report Due Date

January - June

September 1

July - December

March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determination of emissions and operation, which are intended to be made, including sampling and monitoring locations;
- e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and
- g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:
 - i. Illinois EPA - Air Compliance Section
Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276
 - ii. Illinois EPA - Air Regional Field Office
Illinois Environmental Protection Agency
Division of Air Pollution Control
9911 West Harrison
Des Plaines, Illinois 60016
 - iii. Illinois EPA - Air Permit Section (MC 11)
Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

USEPA (AE - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604

- b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].

9.1.2 In particular, this permit does not alter or affect the following:

- a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
- d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated there under.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois, 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control

equipment), practices, or operations regulated or required under this permit;

- d. Sample or monitor any substances or parameters at any location:
 - i. At reasonable times, for the purposes of assuring permit compliance; or
 - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

9.4 Obligation to Comply With Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

9.5 Liability

9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any

loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].
- b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit compliance certifications annually or more frequently as specified in the applicable requirement or by permit condition.

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document, (including reports) required to be submitted by this permit, shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:
 - i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency. Normally, an act of God such as lightning or flood is considered an emergency;

- ii. The permitted source was at the time being properly operated;
 - iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
 - iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15)(b) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(1), (n), and (o) of the Act].

10.0 ATTACHMENTS

10.1 Attachment 1 Summary of Nitric Acid Storage Tank Features

TABLE 1-1

Tank ID#	Product Stored (% Nitric Acid)	Storage Capacity (Gallons)	Fixed Roof	Vapor Pressure at 70°F (psia)	Density of Product Stored (lb/gal)	Annual Throughput (Gallons)
58	58%	237,000	yes	0.01	11.3	58,500,000
65	65%	143,000	yes	0.03	11.6	855,000
35*	98%*	7,500	yes	0.78	12.5	10,000
36*	98%*	7,500	yes	0.78	12.5	10,000
37*	98%*	8,200	yes	0.78	12.5	10,000
40	58%-68%	9,400	yes	0.01-0.05	11.3-11.7	160,000
41	58%-68%	9,400	yes	0.01-0.05	11.3-11.7	160,000
42	58%-68%	7,500	yes	0.01-0.05	11.3-11.7	160,000
43	58%-68%	10,300	yes	0.01-0.05	11.3-11.7	160,000
46	58%-68%	9,400	yes	0.01-0.05	11.3-11.7	160,000
47	58%-68%	8,200	yes	0.01-0.05	11.3-11.7	160,000
48	58%-68%	8,200	yes	0.01-0.05	11.3-11.7	160,000
Collection Tank	58%-68%	5,000	yes	0.01-0.05	11.3-11.7	115,000

* Tanks 35,36 and 37 are used to store 98% nitric acid shipped to the Facility. The Facility is not permitted to manufacture concentrated nitric acid (I.E. 98% nitric acid).

10.2 Attachment 2 Emissions of Particulate Matter from Existing Process Emission Units

10.2.1 Process Emission Units for Which Construction or Modification Commenced Prior to April 14, 1972

- a. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 [35 IAC 212.322(a)].
- b. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.322 shall be determined by using the equation [35 IAC 212.322(b)]:

$$E = C + A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

- i. Up to process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

- ii. For process weight rate in excess of 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

- c. Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972 [35 IAC 212.322(c)]:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lb/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.2	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.0	8.7	10.00	19.20
13.0	11.1	15.00	25.20
18.0	13.8	20.00	30.50
23.0	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

10.3 Attachment 3 Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

10.4 Attachment 4 - Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

1. Administrative Permit Amendment;
2. Minor Permit Modification; and
3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment
 - Corrects typographical errors;
 - Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - Requires more frequent monitoring or reporting by the Permittee;
 - Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittee has been submitted to the Illinois EPA;
 - Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits; or
 - Incorporates into the CAAPP permit revised limitations or other requirements resulting from the application of an approved economic incentives rule, marketable permits rule, or generic emissions trading rule.
2. Minor Permit Modification
 - Do not violate any applicable requirement;

- Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;
- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and
 - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.
- Are not modifications under any provision of Title I of the CAA; and
- Are not required to be processed as a significant permit modification.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- The source's suggested draft permit/conditions;
- Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- Information as contained on form 271-CAAPP for the Illinois EPA to use to notify USEPA and affected States.

3. Significant Permit Modification

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;

- Applications requesting a significant change in existing monitoring permit terms or conditions;
- Applications requesting a relaxation of reporting or recordkeeping requirements; and
- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

- A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or
- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or
- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

Application forms can be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms>.

Note that the request to revise the permit must be certified for truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require the Illinois EPA to deny the application. The Illinois EPA reserves the right to require that additional information be submitted as needed to evaluate or take final action on applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC 270.305.

10.5 Attachment 5 - Form 199-CAAPP, Application For Construction
Permit (For CAAPP Sources Only)



Illinois Environmental Protection Agency
Division Of Air Pollution Control -- Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

Application For Construction Permit (For CAAPP Sources Only)	For Illinois EPA use only
	ID number:
	Permit number:
	Date received:

This form is to be used by CAAPP sources to supply information necessary to obtain a construction permit. Please attach other necessary information and completed CAAPP forms regarding this construction/modification project.

Source Information		
1. Source name:		
2. Source street address:		
3. City:	4. Zip code:	
5. Is the source located within city limits? <input type="checkbox"/> Yes <input type="checkbox"/> No		
6. Township name:	7. County:	8. ID number:

Owner Information		
9. Name:		
10. Address:		
11. City:	12. State:	13. Zip code:

Operator Information (if different from owner)		
14. Name		
15. Address:		
16. City:	17. State:	18. Zip code:

Applicant Information	
19. Who is the applicant? <input type="checkbox"/> Owner <input type="checkbox"/> Operator	20. All correspondence to: (check one) <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Source
21. Attention name and/or title for written correspondence:	
22. Technical contact person for application:	23. Contact person's telephone number:

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

Summary Of Application Contents	
24.	Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs: a) Non-attainment New Source Review – 35 IAC Part 203; b) Prevention of Significant Deterioration (PSD) – 40 CFR 52.21; c) Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources – 40 CFR Part 63?
	<input type="checkbox"/> Yes <input type="checkbox"/> No
25.	Does the application identify and address all applicable emissions standards, including those found in the following: a) Board Emission Standards – 35 IAC Chapter I, Subtitle B; b) Federal New Source Performance Standards – 40 CFR Part 60; c) Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63?
	<input type="checkbox"/> Yes <input type="checkbox"/> No
26.	Does the application include a process flow diagram(s) showing all emission units and control equipment, and their relationship, for which a permit is being sought?
	<input type="checkbox"/> Yes <input type="checkbox"/> No
27.	Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?
	<input type="checkbox"/> Yes <input type="checkbox"/> No
28.	Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control equipment, listing all applicable requirements and proposed exemptions from otherwise applicable requirements, and identifying and describing any outstanding legal actions by either the USEPA or the Illinois EPA? Note: The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information.
	<input type="checkbox"/> Yes <input type="checkbox"/> No
29.	If the application contains TRADE SECRET information, has such information been properly marked and claimed, and have two separate copies of the application suitable for public inspection and notice been submitted, in accordance with applicable rules and regulations?
	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable, No TRADE SECRET information in this application

Note 1: Answering "No" to any of the above may result in the application being deemed incomplete.

Signature Block	
This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.	
30. I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete. Authorized Signature:	
BY:	
_____	_____
AUTHORIZED SIGNATURE	TITLE OF SIGNATORY
_____	_____/_____/_____
TYPED OR PRINTED NAME OF SIGNATORY	DATE

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source's CAAPP permit, if necessary.

10.6 Attachment 6 Guidance on Renewing This Permit

Timeliness - Pursuant to Section 39.5(5)(n) of the Act and 35 IAC 270.301(d), a source must submit to the Illinois EPA a complete CAAPP application for the renewal of a CAAPP permit not later than 9 months before the date of permit expiration of the existing CAAPP permit in order for the submittal to be deemed timely. Note that the Illinois EPA typically sends out renewal notices approximately 18 months prior to the expiration of the CAAPP permit.

The CAAPP application must provide all of the following information in order for the renewal CAAPP application to be deemed complete by the Illinois EPA:

1. A completed renewal application form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.
2. A completed compliance plan form 293-CAAPP, COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT.
3. A completed compliance certification form 296-CAAPP, COMPLIANCE CERTIFICATION, signed by the responsible official.
4. Any applicable requirements that became effective during the term of the permit and that were not included in the permit as a reopening or permit revision.
5. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.
6. Information addressing any outstanding transfer agreement pursuant to the ERMS.
7. a. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. This letter must also include a statement that information incorporated by reference is also being certified for truth and accuracy by the responsible official's signing of the form 200-CAAPP, APPLICATION FOR CAAPP PERMIT and the form 296-CAAPP, COMPLIANCE CERTIFICATION. The boxes should be marked yes on form 200-CAAPP,

APPLICATION FOR CAAPP PERMIT, as existing information is being incorporated by reference.

- b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.
8. Information about all off-permit changes that were not prohibited or addressed by the permit to occur without a permit revision and the information must be sufficient to identify all applicable requirements, including monitoring, recordkeeping, and reporting requirements, for such changes.
9. Information about all changes made under 40 CFR 70.4(b)(12)(i) and (ii) that require a 7-day notification prior to the change without requiring a permit revision.

The Illinois EPA will review all applications for completeness and timeliness. If the renewal application is deemed both timely and complete, the source shall continue to operate in accordance with the terms and conditions of its CAAPP permit until final action is taken on the renewal application.

Notwithstanding the completeness determination, the Illinois EPA may request additional information necessary to evaluate or take final action on the CAAPP renewal application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP renewal application pursuant to Section 39.5 of the Act.

Application forms may be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms.html>.

If you have any questions regarding this matter, please contact a permit analyst at 217/782-2113.

Mail renewal applications to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506

Springfield, Illinois 62794-9506

JMY:psj